Deaths &

Property &

Event Type and Details

Date/Time

Location

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
_AKE MICHIGAN				
SHEBOYGAN TO PT WASHINGTON WI COUNT	TY 3.2 NE KOHLER/ANDRAE 10/19/11 08:05 CST	ST PRK [43.70,	-87.69], 2.6 NE KC	- · · · -
	10/19/11 08:05 CST 10/19/11 08:15 CST		0	Waterspout Source: Public
	10/19/11 00:13 031		O	Source. Fublic
SHEBOYGAN TO PT WASHINGTON WI COUNT	TY 3.1 NE KOHLER/ANDRAE	ST PRK [43.70,	-87.69], 2.8 NE KC	OHLER/ANDRAE ST PRK [43.70, -87.69]
	10/19/11 08:12 CST		0	Waterspout
	10/19/11 08:20 CST		0	Source: Public
DUEDOVOAN TO DT WAQUINGTON W/ COUNT	TV 24 NE VOUL EDIANDRAE	OT DDV 140 70	07.001.0.0 NE.V.	NULED/ANDDAE OF DDV 140 70 OF COL
SHEBOYGAN TO PT WASHINGTON WI COUNT	10/19/11 08:14 CST	51 PKK [43.70,	-87.69], 2.8 NE KC	Waterspout
	10/19/11 08:20 CST		0	Source: Public
Instable conditions in the low levels of the atr with a developing Low Pressure system in the f Lake Michigan during the morning on Octob etween 9 and 930 am CDT over the near shor	Tennessee and Ohio Valleys proper 19th. Based on eyewitness are waters of Lake Michigan, just	roduced severa reports it is esti east-northeast	I waterspouts ove imated that three value of Kohler-Andrae	r the near shore waters waterspouts were visible State Park. The
vaterspouts were just north of an area of show south-southeast from downtown Sheboygan.	Γhe waterspouts dissipated off-	shore.	pouts east-northe	ast from Oostburg and
WIND PT LT WI TO WINTHROP HBR IL COUNT	Y 1.6 NE RACINE [42.74, -87. 10/19/11 13:23 CST	/8]	0	Marine High Wind (MG 50 kt)
	10/19/11 13:23 CST 10/19/11 13:23 CST		0	Source: Public
	10/19/11 13.23 031		U	Source. Fublic
Measured gust at Racine Yacht Club.				
WIND PT LT WI TO WINTHROP HBR IL COUNT	10/19/11 15:10 CST	-87.81]	0	Marine High Wind (MG 47 kt)
	10/19/11 15:10 CST		0	Source: C-MAN Station
Measured at KNSW3 lake shore observation site	e. Sustained winds of 38 knots at	t time of gust.		
NORTH PT LT TO WIND PT WI COUNTY 3.5	SE NORTH BOINT I THOUSE M	2 05 07 001		
TORTH FILL TO WIND FI WI COUNTY 3.5	10/19/11 16:00 CST	3.05, -07.00]	0.10K	Marine Strong Wind (MG 42 kt)
	10/19/11 16:00 CST		0	Source: C-MAN Station
			Ü	Source: S Will Water
Measured at MLWW3 marine observation platfor	m.			
SHEBOYGAN TO PT WASHINGTON WI COUNT	TY 1.4 E SHEBOYGAN [43.75,	-87.69]		
	10/19/11 16:00 CST		0.10K	Marine Strong Wind (MG 45 kt)
	10/19/11 16:00 CST		0	Source: C-MAN Station
Measured at SGNW3 marine observation platfor	m. Prevailing winds of 41 knots a	at time of wind g	just.	
SHEBOYGAN TO PT WASHINGTON WI COUNT	=	-87.69]	0.4017	Marina Chan a Mind (MO 40 10)
	10/19/11 18:00 CST		0.10K	Marine Strong Wind (MG 46 kt)
	10/19/11 18:00 CST		0	Source: C-MAN Station
Measured at SGNW3 marine observation platfor	m. Prevailing winds of 37 knots	at time of gust.		
WIND PT LT WI TO WINTHROP HBR IL COUNT	Y 1.6 NE RACINE [42.74, -87.	78]		
	10/19/11 18:00 CST	-	0	Marine High Wind (MG 63 kt)
	10/19/11 18:00 CST		0	Source: Public
Measured at Racine Yacht Club.				
WIND PT LT WI TO WINTHROP HBR IL COUNT	Y 1.2 ENE KENOSHA [42.59,	-87.81]		
	10/19/11 18:20 CST	•	0	Marine High Wind (MG 53 kt)
	10/19/11 18:20 CST		0	Source: C-MAN Station

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Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details	
Measured at KNSW3 marine observ	ation platform. Prevailing wind 43 knots at	t time of wind gust.			
NORTH PT LT TO WIND PT WI COL	JNTY 3.5 SE NORTH POINT LTHOUSE	[43.05, -87.88]			
	10/19/11 19:00 CST		0.30M	Marine Strong Wind (MG 46 kt)	
	10/19/11 19:00 CST	1	0	Source: C-MAN Station	
Measured at MLWW3 marine observ	vation platform.				
WIND PT LT WI TO WINTHROP HB	R IL COUNTY 3.2 E WIND POINT [42.78	3, -87.77]			
	10/19/11 21:00 CST		0	Marine High Wind (EG 50 kt)	
	10/19/11 21:00 CST		0	Source: Public	
Tree damage at Shoop Park Golf Co	ouse in Wind Point. Wind gust speed and t	time estimated.			
WIND PT LT WI TO WINTHROP HB	R IL COUNTY 0.7 NNE RACINE [42.73,	-87.80]			
	10/19/11 23:15 CST		0.10K	Marine Strong Wind (MG 40 kt)	
	10/19/11 23:15 CST		0	Source: Mesonet	
Measured at 21st Century Prep Sch	ool.				

0.10K

0

Marine Strong Wind (MG 41 kt)

Source: Mesonet

Measured at Sheboygan North High School.

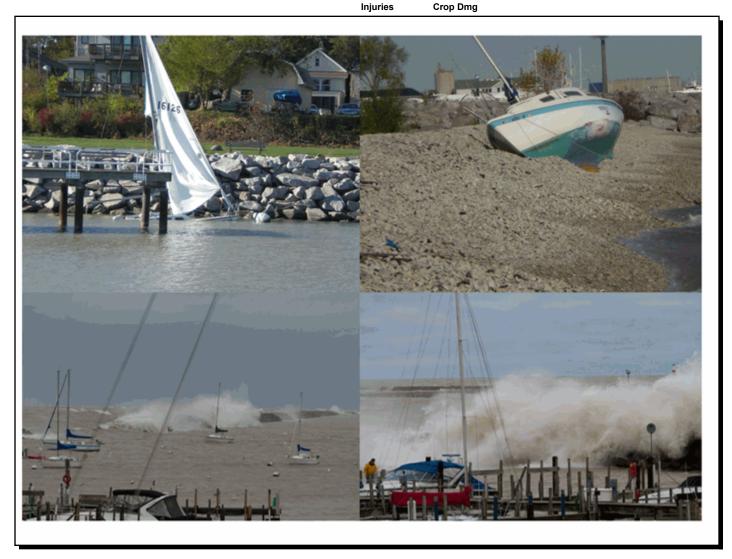
Rapidly developing low pressure moved across western Ohio and southeast Lower Michigan during the overnight period of October 19th and morning of October 20th. An associated strong pressure gradient and lingering unstable conditions over Lake Michigan allowed strong gusty north to northeast winds to mix down to the lake surface. The lake surface temperature at this time was estimated to be in the 54 to 58 degree range. Wind gusts reached 50 to 70 mph along the lake shore. The strong winds caused high waves of 12 to 16 feet. The strong winds and high waves caused extensive damage to boats in the South Shore Yacht Club, mainly due to an eroding and failing breakwall protecting the southern part of Milwaukee Harbor. Three boats were totally destroyed at the yacht club. Four others were washed ashore and were able to be salvaged. Two of the destroyed boats were sunk. One person at the Club, while trying to secure a boat with a rope line, was tossed about on the boat due to wave action and injured (directly-related).

10/19/11 23:20 CST

10/19/11 23:20 CST

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Location Date/Time Deaths & Property & Event Type and Details



Here are several images showing the high waves crashing on the breakwall located in the southern end of Milwaukee Harbor, just east of the South Shore Yacht Club. Also pictured are several of the boats that sustained damage from the high waves. Photographs taken by Chris Gribble, a member of the South Shore Yacht Club.

WIND POINT WI TO WINTHROP HARBOR IL 5NM OFFSHORE TO MID LAKE COUNTY --- 1.2 ENE KENOSHA [42.59, -87.81]

10/23/11 21:00 CST 0 Marine Thunderstorm Wind (MG 40 kt)

10/23/11 21:10 CST 0 Source: C-MAN Station

Wind gusts of 39 to 40 knots lasted 10 minutes.

A line of strong thunderstorms caused by a weak frontal boundary affected the near shore waters of Lake Michigan south of North Point Lighthouse to the Illinois border during the evening.

WISCONSIN, Southeast

(WI-Z052) SHEBOYGAN, (WI-Z060) OZAUKEE

10/19/11 16:00 CST 4K Strong Wind (MAX 46 kt)

10/20/11 08:30 CST 0

Rapidly developing low pressure moved across western Ohio and southeast Lower Michigan during the overnight period of October 19th and morning of October 20th. An associated strong pressure gradient produced strong gusty north to northeast winds over Sheboygan and Ozaukee Counties. Wind gusts reached 40 to 53 mph near the Lake Michigan shore. The persistent strong winds downed weak trees and tree limbs which then snapped power-lines, causing scattered power outages.

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Location	Date/Time	Deaths &	Property &	Event Type and Details	
		Injuries	Crop Dmg		
(WI-Z059) WASHINGTON, (WI-Z065)	WAUKESHA, (WI-Z070) WALWORTH				
	10/19/11 16:00 CST		6K	Strong Wind (MAX 39 kt)	
	10/19/11 19:53 CST		0		
19th and morning of October 20th.	oved across western Ohio and southeas An associated strong pressure gradient rth Counties. Sustained winds reached	produced strong	gusty north to	northeast winds over	
19th and morning of October 20th. Washington, Waukesha and Walwo strong winds downed weak trees a	An associated strong pressure gradient rth Counties. Sustained winds reached nd tree limbs which then snapped power	produced strong 30 mph, with estir	gusty north to nated gusts up	northeast winds over to 45 mph. The persistent	
19th and morning of October 20th. Washington, Waukesha and Walwo	An associated strong pressure gradient rth Counties. Sustained winds reached nd tree limbs which then snapped power	produced strong 30 mph, with estir	gusty north to nated gusts up	northeast winds over to 45 mph. The persistent	

Rapidly developing low pressure moved across western Ohio and southeast Lower Michigan during the overnight period of October 19th and morning of October 20th. An associated strong pressure gradient and unstable conditions over the relatively warmer waters of Lake Michigan allowed strong gusty north to northeast winds to mix down to the lake surface and push inland from Milwaukee south to the Illinois border. Wind gusts reached 50 to 70 mph along the lake shore...and up to 51 mph inland. In downtown Milwaukee, wind and debris broke a few windows in the U.S. Bank tower. Elsewhere...some weak trees were uprooted and there were many reports of broken tree branches. This tree debris damaged at least a couple homes and resulted in scattered power outages as power-lines came down. The strong winds and high waves caused extensive damage to several boats and docks at the South Shore Yacht Club in Milwaukee. Refer to the separate Marine Strong Wind event within Storm Data for details.

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